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DSSD CENSUS 2000 PROCEDURES AND OPERATIONS MEMORANDUM SERIES#U-2

MEMORANDUM FOR Ruth Ann Killion
Chief, Planning, Research, and Evaluation Division.

From: Howard Hogan *Howard Hogan*
Chief, Decennial Statistical Studies Division

Subject: Study Plan for the Analysis of Listing Future Construction and
Multi-Units in a special Place, N.2

Attached is the study plan for the Analysis of Listing Future Construction and Multi-Units in a special Place, N.2. The Census 2000 Evaluation Program quality assurance process was applied to the methodology development and the study plan review process. The study plan is sound and appropriate for completeness and accuracy, and it answers its intended category questions as appropriate.

If you have questions about this study plan, please contact Xijian Jim Liu on (301) 457-8325.

Attachment (Analysis of Listing Future Construction and Multi-Units in a Special Place, N.2. Study Plan)

cc: Evaluations Executive Steering Committee
Keith Bennett (PRED)
Linda Brudvig
Jason Machowski
Danny Childers (DSSD)

**Census 2000 Operational Summary
Study Plan
(Final)**

I. Name of Operation

Analysis of Listing Future Construction and Multi-Units in a Special Place.
DSSD Census 2000 Evaluation Project N.2.

II. Project Managers

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III. Operational Background

A. Census 2000

The Accuracy and Coverage Evaluation (A.C.E.) measures the overall and differential coverage of the US population in Census 2000. It uses dual system estimation which requires two samples, the P-sample and the E-sample. The P-sample consists of people enumerated independent of the census. The E-sample consists of people enumerated in the census. The major steps of the A.C.E. are housing unit matching and person matching. In housing unit stages, housing units within the sample block clusters are listed and matched to the census inventory of housing units. The January 2000 version of DMAF was used in the preliminary housing unit matching. An updated DMAF will be use in the final housing unit matching. Two new categories, future construction and multi-units in a special place are included in the A.C.E. independent listing.

A housing unit is a house, an apartment, a mobile home, a group of rooms or a single room occupied as separate living quarters or, if vacant, intended for occupancy as a separate living quarters. Addresses designated as future construction are constructions that had not started at the time of A.C.E. independent listing. They did not fit into the definition of housing units at that time. Addresses designated as under construction are constructions that had started but not progressed enough to fit the definition of housing units at the time of independent listing. Addresses of future constructions and under constructions were included in housing unit follow up. An address of these types was included in further A.C.E. processing if it fitted into the definition of a housing unit at the time of housing unit follow-up. If it had not progressed enough to fit the definition of a housing unit, it was coded removed from the A.C.E. housing unit inventory. Since the A.C.E. independent listing began in September 1999, addresses of future construction and under construction have the potential of

becoming housing units on census day.

Multi-unit addresses in a special place were listed in almost the same way as multi-unit addresses not in a special place. Basic street address information was put in the Listing Page section of the Independent Listing Book (ILB), and unit information was put in the Multi-Unit Address Page section. For multi-units in a special place, listers were instructed to put the special place and contact person names in a space provided.

IV. Questions to be Answered and Methodology

This study analyzes the effect of adding the two categories, future construction and multi-units in a special place on matching.

1. How many housing units were added to the A.C.E., due to the new category, future construction? What are the effects of adding this new category on housing unit matching?

- a. Methodology

Compute the number of housing units added due to future construction and under construction. Compute and analyze housing unit nonmatch rate for future construction and under construction.

This analysis will be done using the final housing unit data. The following variables will be considered in the analysis: Region, type of enumeration area, sampling stratum, relist, single/multi-unit. (Clusters that had 80% A.C.E. housing units coded as geocoding errors, GI, were relisted. They were treated as no preliminary housing unit matching).

Housing unit nonmatch rate is the weighted number of nonmatch housing units divided by the weighted number of A.C.E. housing units.

Standard errors will be computed using a stratified Jackknife method via VPLX.

- b. Limitation

See V.

- c. Processing Requirements

- (1) Programming and Computer

The data used in this study will be extracted from

- HUMaRCS files (final housing unit).
- ACE sample design file,
- Missing data files.

The data files will be provided by DSSD and are expected to be available in July, 2001.

Addresses in these categories are identified by a variable, unit status (USTAT), in the A.C.E. address file, USTAT=2 for under construction and USTAT= 3 for future construction.

2. What are the effects of adding the new category of future construction on person matching?

a. Methodology

Compute and analyze P-sample person nonmatch rate for future construction and under construction.

The following variables will be considered in the analysis: Regions, type of enumeration area, owner/renter, race/Hispanic groups and sex/age groups.

P-sample person nonmatch rate is the weighted number of person nonmatches divided by the weighted number of P-sample persons.

Standard errors will be computed using a stratified Jackknife method via VPLX.

b. Limitation

See V.

c. Processing Requirements

(1) Programming and Computer

The data used in this study will be extracted from

- PERMaRCS files.
- ACE sample design file,
- Missing data files.

The data files will be provided by DSSD and are expected to be available in July, 2001.

Addresses in these categories are identified by a variable unit status in the A.C.E. address file, USTAT=2 for under construction and USTAT=3 for future construction.

3. How many housing units were added to the A.C.E., due to the new category, multi-units in a special place? What were the results of HU matching in multi-units in special place?

- a. Methodology

Compute the number of housing units added due to multi-units in a special place. Compute and analyze the housing unit nonmatch rate for the category multi-unit in a special place. We will also look at single family houses in a special place as a comparison.

The analysis is done using the final housing unit data. The following variables will be considered in the analysis: Regions, type of enumeration area, sampling stratum, relist.

Standard errors will be computed using a stratified Jackknife method via VPLX.

- b. Limitation

See V.

- c. Processing Requirements

- (1) Programming and Computer

The data used in this study will be extracted from

- HUMaRCS files,
- ACE sample design file,
- Missing data files.

These data files will be provided by DSSD and are expected to be available in July, 2001.

Addresses in the category of multi-units in a special place and single family houses in a special place are identified by a variable type of address in the A.C.E. address file, TOA=6 for multi-units in a special place, TOA=5 for single family houses in a special place.

4. What were the results of person matching in multi-units in special place?

a. Methodology

Compute and analyze the P-sample person nonmatch rate for the category multi-unit in a special place.

The following variables will be considered in the analysis: Regions, type of enumeration area, relist, race/Hispanic groups, sex/age groups.

Standard errors will be computed using a stratified Jackknife method via VPLX.

b. Limitation

See V.

c. Processing Requirements

(1) Programming and Computer

The data used in this study will be extracted from

- PERMaRCS files,
- ACE sample design file,
- Missing data files.

These data files will be provided by DSSD and are expected to be available in July, 2001.

Addresses in the category of multi-units in a special place and single family houses in a special place are identified by a variable type of address in the A.C.E. address file, TOA=6 for multi-units in a special place, TOA=5 for single family houses in a special place.

V. Limitations

The HCUF does not have a variable that identifies addresses of future construction and multi-units in a special place. Net undercounts for these two types of addresses can not be determined. Addresses in a special place are subject to mis-classification errors.

VI. Milestone Schedule

Activity	Start Date	End Date
1. Develop Study Plan	03/01/00	06/30/00
2. Specify Data Needs	03/01/00	06/30/00
3. Specify Other Activities	03/01/00	06/30/00
4. Finalize Study Plan	06/01/00	08/31/00
5. A.C.E. Independent Listing	09/07/99	12/08/99
6. Before follow-up housing matching	01/31/00	03/10/00
7. Housing Unit Follow-Up	02/22/00	04/04/00
8. After Follow-Up Coding	03/06/00	04/18/00
9. Final Housing Unit Matching and Follow-Up	03/07/01	05/22/01
10. Delivery of the Data	07/01/01	07/10/01
11. Start Analysis	07/01/01	10/01/01
12. Start/End First Draft of the Report	10/01/01	12/31/01
13. Roundtable Presentation	12/01/01	12/31/01
14. Start/End Second Draft of the Report	01/01/02	03/31/02
15. Prepare Final Report for Signature	04/01/02	05/31/02
16. Report is Issued	06/01/02	07/31/02

VII. Related Studies/Operations

None.

VIII. References

Accuracy and Coverage Evaluation: The Design Document, Danny R. Childers, DSSD
Census 2000 Procedures and Operations Memorandum Series, Chapter S-DT-1.